

## **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): Process for improving energy supply when heating and melting a scrap bulk within a vessel having side and top walls, wherein preheated oxidizing gas with addition of fossil fuels melts a channel into the scrap bulk, and further energy supply occurs through this channel and wherein hot blast is supplied to the scrap bulk ~~from the top~~ from said top wall.
2. (Currently Amended): The process as claimed in claim 1, wherein the hot blast supply occurs centrally from the top blows onto the scrap bulk from a central top position.
3. (Previously Presented): The process as claimed in claim 1, wherein the hot blast is divided into several separate jets.
4. (Previously Presented): The process as claimed in claim 1, wherein the hot blast is distributed to a central jet with 35 to 65 % of the total amount and several jets outside the central jet for the rest.
5. (Previously Presented): The process as claimed in claim 1, wherein hot blast is supplied via a vertically adjustable lance.
6. (Previously Presented): The process as claimed in claim 5, wherein the hot blast lance rotates around the vertical axis.
7. (Previously Presented): The process as claimed in claim 1, wherein a hot heel remains in the furnace.
8. (Previously Presented): The process as claimed in claim 7, wherein the hot heel in the furnace makes up 10 to 30 % of the melt.

9. (Previously Presented): The process as claimed in claim 1, wherein oxygen is injected via bottom blowing tuyeres.
10. (Previously Presented): The process as claimed in claim 9, wherein the bottom blowing tuyeres are installed in an indentation of the furnace bottom.
11. (Previously Presented): The process as claimed in claim 1, wherein a high hot blast velocity 500 to 900 m/sec is applied during a first phase and a reduced hot blast velocity approx. 300 to 500 m/sec during a second phase.
12. (Previously Presented): The process as claimed in claim 11, wherein the hot blast jet is enriched with oxygen to 30 to 50 % in phase 1, whereas there is no or hardly any oxygen enrichment in phase 2.
13. (Previously Presented): The process as claimed in claim 11, wherein the distance of the hot blast jet to the surface of the scrap is 0.2 to 0.5 m in phase 1 and is adjusted to a distance to the iron bath of at least 3 m during phase 2.